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| APPLICATION NUMBER | FILING DATE | FIRST NAMED APPLICANT | ATTY. DOCKET NO. |
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08/815,745 03/12/97 LIANG

D 30473/RDS

EXAMINER

PM41/0306

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SCIENTIFIC PAPER NUMBER

3625  
DATE MAILED:

03/06/98

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

### OFFICE ACTION SUMMARY

- ☐ Responsive to communication(s) filed on \_\_\_\_\_
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

#### Disposition of Claims

- ☒ Claim(s) 1-27 is/are pending in the application.  
Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☒ Claim(s) 1-4, 12-16 & 27 is/are allowed.
- ☒ Claim(s) 5-11, 17-22 & 24-27 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

#### Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. § 119

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

- ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e).

#### Attachment(s)

- ☒ Notice of Reference Cited, PTO-892
- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 283
- ☐ Interview Summary, PTO-413
- ☒ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

--SEE OFFICE ACTION ON THE FOLLOWING PAGES--

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### DETAILED ACTION

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 5-11, 17-22 and 24-27 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant regards as their invention.

It is impermissible to make a change in a dependent claim which has previously been set forth in a claim upon which it depends. The following claim features make such an attempt:

claim 5, "spherical cemented";  
claim 6, "80-200 mesh";  
claim 7, "100-200 mesh";  
claim 8, "macrocrystalline";  
claim 9, "ultra-fine";  
claim 10, "ultra-fine";  
claim 17, "16-40 mesh";  
claim 18, "spherical cemented";  
claim 19, "macrocrystalline";  
claim 20, "10-35 percent";  
claim 21, "ultra-fine";  
claim 24, "ultra-fine";  
claim 25, "ultra-fine";  
claim 26, "the ultra-fine"; and in  
claim 27, "100 to 200 mesh" is not "between" the cited ranges.

3. Claims 1-4, 12-16 and 23 are allowed.

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4. Claims 5-11, 17-22 and 24-27 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112 set forth in this Office action.


5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In particular are cited White et al and Bigelow et al as disclosing bit designs of interest.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Roger Schoepfel whose telephone number is (703) 308-2147. The examiner can normally be reached on Monday through Thursday from 6:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tamara Graysay, can be reached on (703) 308-2144. The fax phone number for this Art Unit is (703) 305-3597.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2168.

R. Schoepfel/rjs  
February 5, 1998

  
ROGER SCHOEPPPEL  
PRIMARY EXAMINER  
ART UNIT 3625